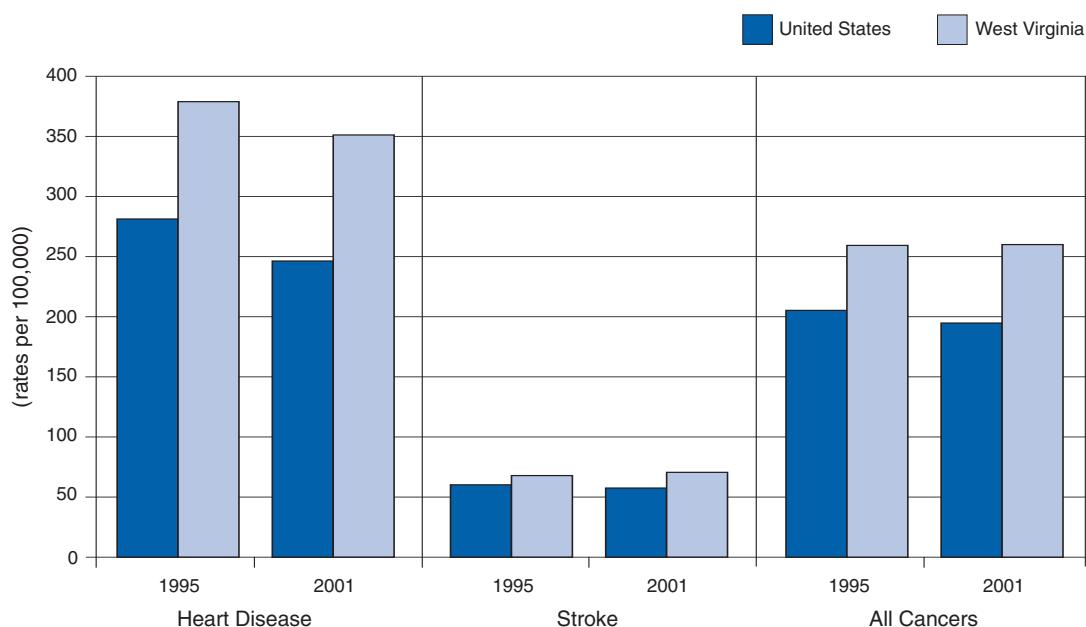


## Chronic Diseases: The Leading Causes of Death

### The Leading Causes of Death

United States and West Virginia, 1995 and 2001



Source: National Center for Health Statistics, 2003

### The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

### Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

# The Leading Causes of Death and Their Risk Factors

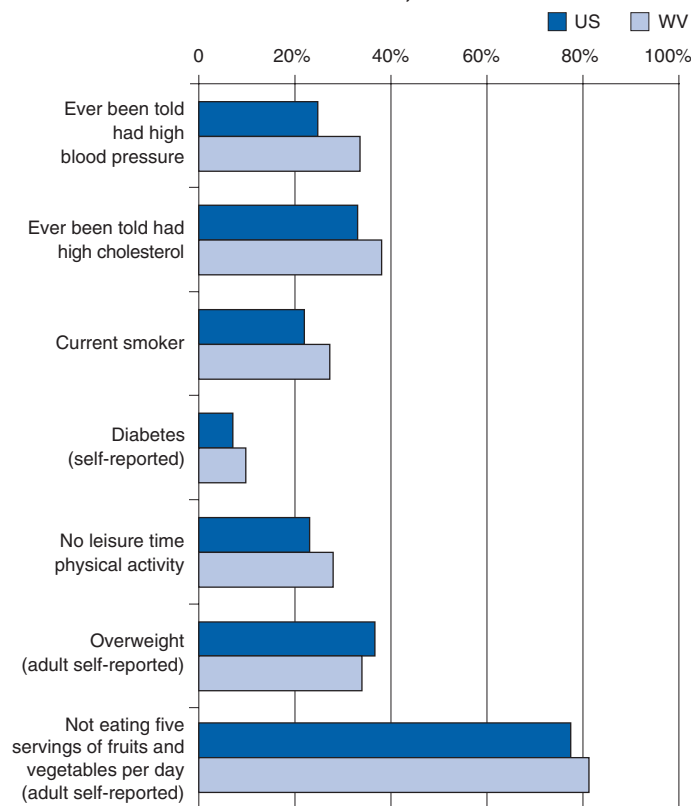
## Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in West Virginia, accounting for 6,325 deaths or approximately 30% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the fourth leading cause of death, accounting for 1,272 deaths or approximately 6% of the state's deaths in 2001.

### Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

## Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 4,710 are expected in West Virginia. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 11,430 new cases that are likely to be diagnosed in West Virginia.

Estimated Cancer Deaths, 2004

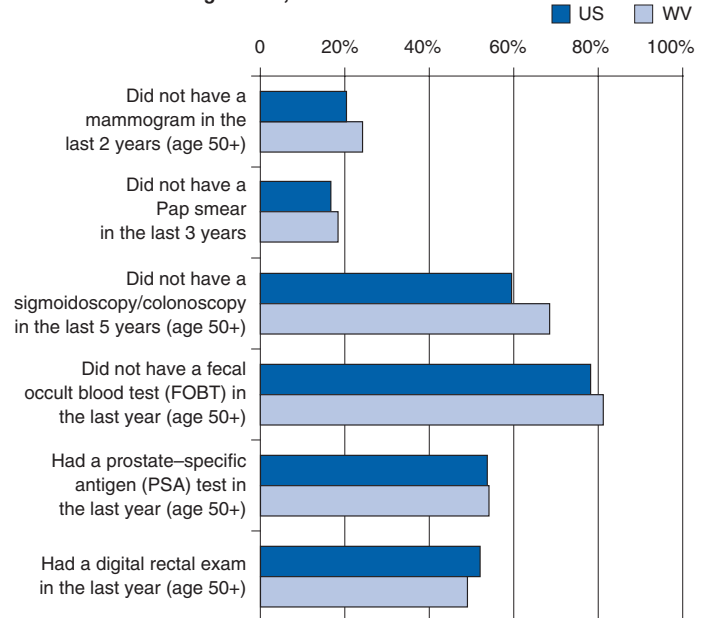
Cause of death	US	WV
All Cancers	563,700	4,710
Breast (female)	40,110	300
Colorectal	56,730	490
Lung and Bronchus	160,440	1,640
Prostate	29,900	200

Source: American Cancer Society, 2004

### Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

# West Virginia's Chronic Disease Program Accomplishments

## Examples of West Virginia's Prevention Successes

- Statistically significant decreases in cancer deaths among men and women across all races, with the greatest decrease occurring among African American men (382.0 per 100,000 in 1990 versus 340.3 per 100,000 in 2000).
- A 24.7% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 48.9% in 1992 to 24.2% in 2002).
- A 6.9% decrease in the percent of women who reported not having had a Pap smear in the last 3 years (from 25.3% in 1992 to 18.4% in 2002).

## CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to West Virginia in the areas of cancer, heart disease, stroke, and related risk factors.

**CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for West Virginia, FY 2003**

<b>SURVEILLANCE</b>	
Behavioral Risk Factor Surveillance System (BRFSS) <i>West Virginia BRFSS</i>	\$122,117
National Program of Cancer Registries <i>West Virginia Cancer Registry</i>	\$323,964
<b>CHRONIC DISEASE PREVENTION AND CONTROL</b>	
Cardiovascular Health Program <i>Ebenezer Medical Outreach</i> <i>The West Virginia Restaurant Survey</i> <i>Wheeling Walks Program</i>	\$1,000,000
Diabetes Control Program <i>Diabetes Control and Prevention Program</i>	\$859,827
National Breast and Cervical Cancer Early Detection Program <i>Breast and Cervical Cancer Screening Program</i>	\$3,980,000
National Comprehensive Cancer Control Program <i>Comprehensive Cancer Control Program</i>	\$686,353
WISEWOMAN <i>Cookin' Up Health</i>	\$442,492
<b>MODIFYING RISK FACTORS</b>	
National Tobacco Prevention and Control Program <i>West Virginia Tobacco Prevention and Control Program</i>	\$1,090,470
State Nutrition and Physical Activity/Obesity Prevention Program <i>Aerobics Classes in African American Churches (CVH Minority Initiatives)</i> <i>Community Based Initiative Grants</i> <i>School Health Index</i> <i>State Health Education Conference</i> <i>Walk Across West Virginia</i> <i>West Virginia State Trails Plan</i> <i>West Virginia on the Move</i>	\$449,255
Racial and Ethnic Approaches to Community Health (REACH 2010)	\$0
<b>Total</b>	<b>\$8,954,478</b>

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

## Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in West Virginia that fall into other health areas. A listing of these programs can be found at <http://www.cdc.gov/nccdphp/states/index.htm>.

# Opportunities for Success

## Chronic Disease Highlight: Obesity

Obesity is one of the most serious risk factors for a variety of chronic diseases, such as heart disease, diabetes, and hypertension. The obesity prevalence in West Virginia has been consistently higher than in the United States as a whole since state-level monitoring began through CDC's Behavioral Risk Factor Surveillance System (BRFSS). In 1990, the West Virginia rate for adult obesity was 15%, compared with 11.6% for the United States. By 2003, the state obesity rate had increased to 27.6%, compared with 22.2% for the United States.

Poor nutrition and physical inactivity are risk factors for obesity. Data from the BRFSS indicate that in 2003, 57.3% of people in West Virginia did not meet the recommended guidelines for moderate physical activity, compared with the national average of 52.8%. In addition, only 18.7% of people in West Virginia reported eating 5 or more servings of fruits and vegetables per day, compared with the national average of 22.5%.

Data from the 2002 BRFSS show that West Virginians who are obese are more likely than those at a healthy weight to have suffered a heart attack; been diagnosed with hypertension, diabetes, and/or asthma; or to have been limited in their activities because of back pain. While more West Virginians who are obese report that they are trying to lose weight, they are less likely to be physically active or to eat a diet that includes at least five servings of fruits and vegetables per day.

Youth in West Virginia are less active than youth nationwide, according to data from CDC's 1999 Youth Risk Behavior Survey. Those data show that only 38.2% of the state's high school students were enrolled in physical education classes in that year, compared with a national average of 56.1%. Less than half of these students (49.5%) participated on a sports team, while nationally, 55.1% of students reported participating in a team sport.

In 1993, the West Virginia Bureau of Public Health established the West Virginia Coalition of Physical Activity to address the increase in sedentary lifestyles of state residents and to provide a platform to support Healthy People 2010 objectives. Each year, the Coalition coordinates *Walk Across West Virginia*, a statewide physical activity campaign that recruits over 6,300 participants.

Text adapted from *Obesity: Facts, Figures, Guidelines* (2002).

## Disparities in Health

Almost 20% of the U.S. population lives in rural areas. People in these rural areas have a higher risk of heart disease, diabetes, and cancer, which is attributable in part to a population that is older, poorer, and less educated. In addition, access to physicians and other health care services is limited. People living in rural areas are also more likely to use tobacco.

West Virginia is the second most rural state in the United States, with 64% of its population living in communities of fewer than 2,500 people and 45 of its 55 counties designated as "nonmetropolitan" by the Bureau of the Census. West Virginia is located in Appalachia, a mountainous region in the eastern United States where, from 1994 to 1998, the death rate for all cancers was significantly higher (176.3 per 100,000) than the corresponding national rate (166.7 per 100,000).

Rural Appalachian culture influences health in several important ways. Appalachians inhabit a particular mountain environment that separates them physically from other cultural groups and the resources of those groups. Thus, rural Appalachian culture has developed in a historical context of isolation and exploitation, which has assured major differences between Appalachian culture and the dominant urban culture. Many Appalachian residents are reluctant to use the mainstream medical system except for emergencies. Health interventions that are developed with consideration for Appalachian culture, values, language, and behaviors have been most successful in altering the health status of mountain dwellers.

## Other Disparities

- **Cancer:** African American men in West Virginia in 2000 had a higher cancer death rate than whites (340.3 per 100,000, compared with 278.6 per 100,000). Among women, however, the death rate in 2000 was lower for African Americans than whites (187.6 per 100,000, compared with 189.1 per 100,000).
- **High Blood Pressure:** African Americans in West Virginia are more likely to report having high blood pressure than their white counterparts (42.3%, compared with 33.1%).
- **Cardiovascular Disease:** From 1996 to 2000, in West Virginia the death rates among African Americans for heart disease (669 per 100,000) and stroke (137 per 100,000) were higher than the corresponding rates for whites (642 per 100,000 for heart disease and 117 per 100,000 for stroke).

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For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962  
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